

Application No. 10/649,068

Docket No.: 65937-0037

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows and replace paragraphs [0025], [0027], [0030], [0034], and [0037] with the following:

[0025] In another embodiment of the present invention, the tip of target confirmation device itself may be used to provide the reference point in the MR image, provided the target confirmation device material exhibits a relatively low artifact, or alternatively provides a signal void, during MR imaging. As used herein, the term "artifact" describes a material's tendency to distort an MR image. The term "signal void" describes the absence of signal, generally presented as a dark area in the MR image. A material exhibiting a relatively high artifact will render the adjacent body tissue surrounding the material unreadable in an MR image. Conversely, a material with a relatively low artifact will allow the material to be readily identified in the MR image and will not significantly distort the MR image of the surrounding adjacent tissue. Alternatively, a material providing a signal void will not significantly distort the MR image. In addition to materials providing a low artifact or a signal void, the target confirmation material may include any material exhibiting properties that provide for a contrasting image region against the adjacent tissue. Thus, the contrasting image region provides a reference point in an imaging modality relative to the target biopsy site. Indeed, the target confirmation material may be chosen based on performance requirements and context of use including, but not limited to, imaging modality (or modalities, if the target confirmation material may be used with multiple modalities), artifact properties, signal void properties, contrast requirements, and expected adjacent tissue properties (e.g., soft tissue, muscle tissue, brain tissue, tissue density, etc.). Further, the target confirmation material may be selected to provide intermediate levels of artifact and/or signal void.

[0027] In still another embodiment, introducer stylet 22-30 may function as a target confirmation device. In this embodiment, introducer stylet 22-30, and more particularly stylet 30, may be made of an MRI compatible material that preferably, but not necessarily, exhibits a relatively low artifact or a signal void.

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[0030] Referring to FIG. 6, an ~~aspirating~~ wand 68 is shown that can be inserted into outer cannula 24. In an embodiment, ~~aspirating~~ wand 68 extends from a connecting end 70 to an insertion end 72 and includes an inner lumen 74 that extends from connecting end 70 to insertion end 72. Connecting end 70 may include a luer interface or other suitable fitting for connecting ~~aspirating~~ wand 68 to a vacuum source (not shown). ~~Aspirating wand~~ Wand 68 may also include a cap 76 that can be placed onto connecting end 70 to inhibit fluid leakage when ~~aspirating~~ wand 68 is inserted into the patient. The haemostatic valve 41 in outer cannula 24 seals against ~~aspirating~~ wand 68, as it does against target confirmation device 26 and biopsy device 50, when inserted into outer cannula 24. Additionally, the outside diameter of ~~aspirating~~ wand 68 is less than the inside diameter of inner lumen 40 to allow saline or other fluids introduced through fluid conduit 40 to pass into the patient's body. When cap 76 is removed and ~~aspirating~~ wand 68 is connected to a vacuum source, fluids, such as blood and saline, can be aspirated from the biopsy site.

[0034] Fluids may be inserted into or removed from the patient's body through inner lumen 40 via fluid conduit 42. These fluids may include, for example, additional anesthetics and/or saline solution to cleanse pathway 84 and remove blood. Accumulated blood and other fluids within pathway 84 may be aspirated through fluid conduit 42 or by inserting ~~aspirating~~ wand 68 prior to insertion of target confirmation device 26.

[0037] After completion of the biopsy, the biopsy site can be aspirated using ~~aspirating~~ wand 68 (see, e.g., FIG. 11). During or after aspiration, a final image of the biopsy site can be taken to confirm removal of the target tissue. Finally, an MRI identifiable marker, such as a collagen plug, or other medical treatment can be inserted into the biopsy site through outer cannula 24.